accenture

Innovation delivered.

Moving To CMMI Level 4 (SW/SE/IPPD)

CMMI User Conference
Denver, Colorado
November 2003

Sarah Bengzon, Associate Partner

Copyright © 2003 Accenture All Rights Reserved. Accenture, its logo, and Accenture Innovation Delivered are trademarks of Accenture.

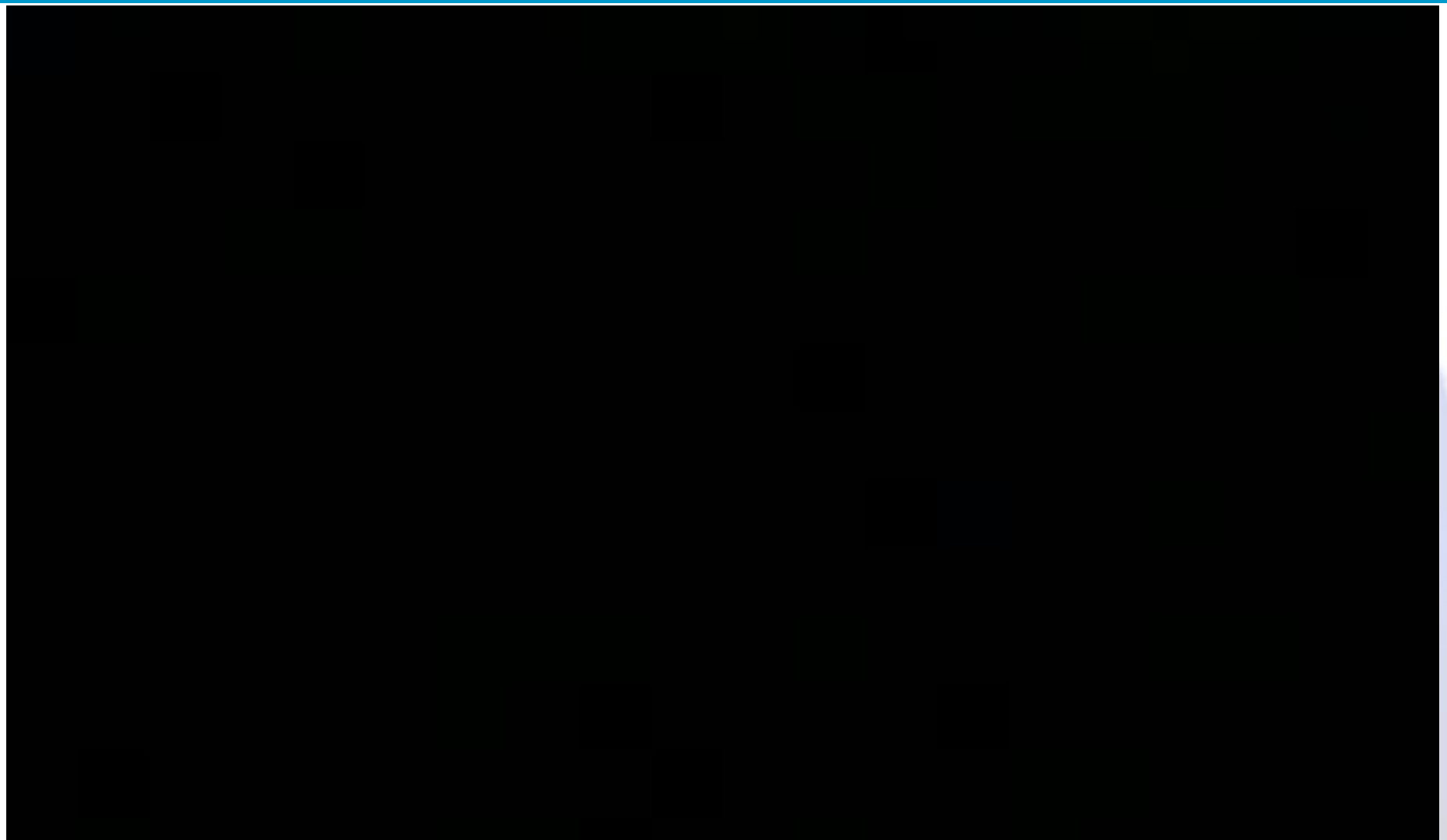
Agenda

2. About Accenture

3. Moving to CMMI Level 4

4. Questions

1. About Accenture



Accenture (NYSE: ACN)

- Global management consulting and technology services company
- Collaborates with clients to help them realize their visions and create tangible value
- With more than 80,000 people in 47 countries, we can quickly mobilize the right people, skills, alliances, tools and technologies to deliver innovation
- Integrates consulting and outsourcing services to help clients:
  - Identify critical areas with potential for maximum business impact
  - Innovate and transform the processes in those areas
  - Deliver performance improvements and lower operating costs by assuming responsibility for certain business functions or areas
- We serve 89 of the *Fortune* Global 100 and more than two-thirds of the *Fortune* Global 500.
- More than 90 percent of our top 100 clients in fiscal year 2002 have been clients for the past five years, and more than 60 percent have been clients for at least 10 years.

Market-facing Structure

2. Moving to CMMI Level 4

- Process Improvement Journey
- CMMI Level 4 Approach
- CMMI Level 4 Key Activities
  - Getting Started
  - Implementation Activities
- CMMI Level 4 Transition Experiences

Process Improvement Journey

5 Emphasis on continuous improvement

4 Process measured and statistically controlled

3 Process characterized for the organization

2 Process characterized for projects and is often reactive

1 Process unpredictable, po controlled and reactive

Optimizing

Quantitatively Managed

Defined

Managed

Initial

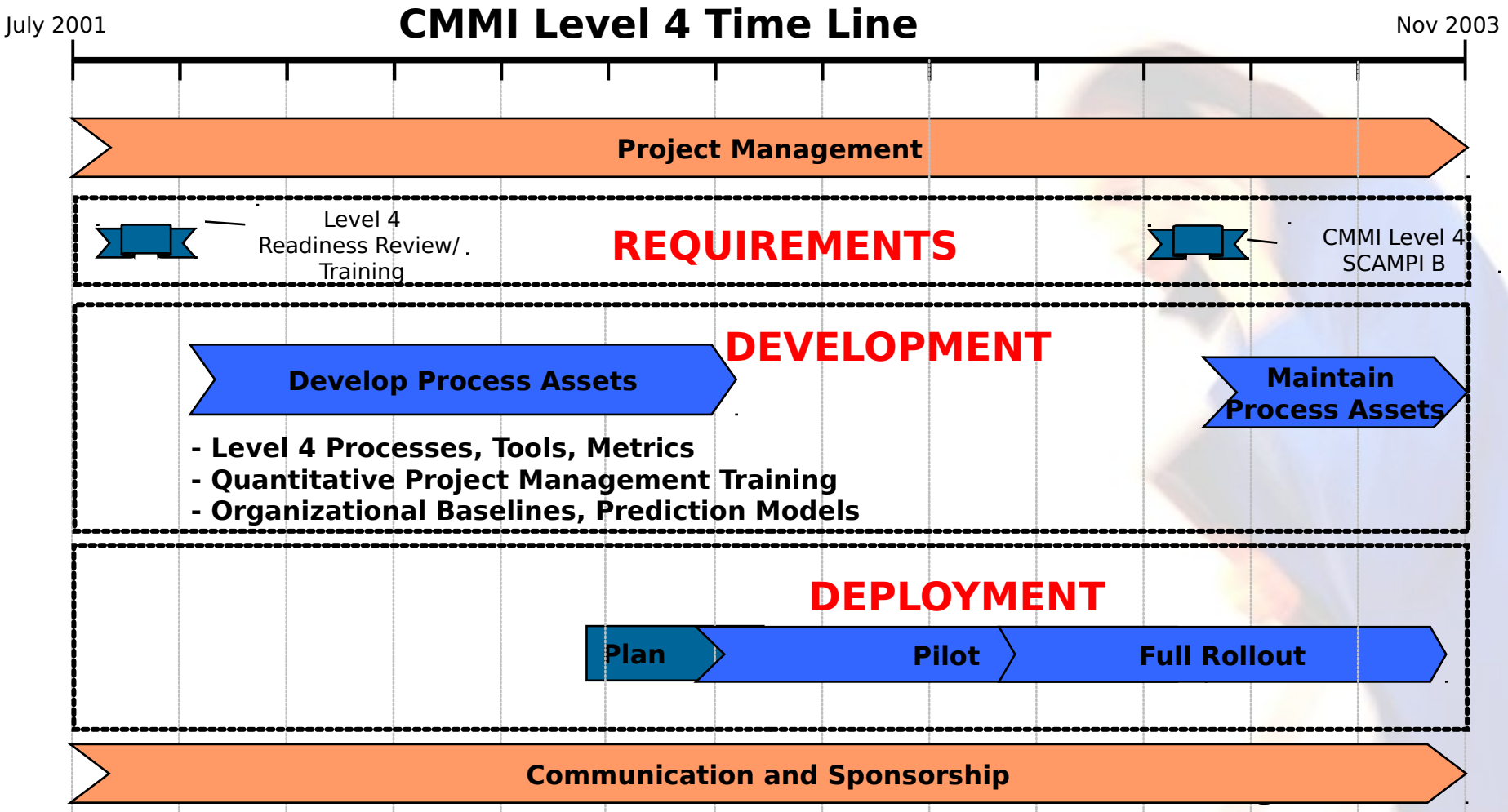
May 2002: Achieved CMMI Level 3 for USA Government OU (Federal, East, West, AGG)

October 2000: Achieved Level 3 for Federal Client Group

May 2000: Achieved CMM Level 2 for Federal Client Group

Level 4 Appraisal

CMMI Level 4 Approach



CMMI Level 4 Key Activities: 1. Getting Started

Accenture conducted a Readiness Review and Training activities to kickoff its CMMI level 4 activities.

CMMI Level 4 Process Areas:

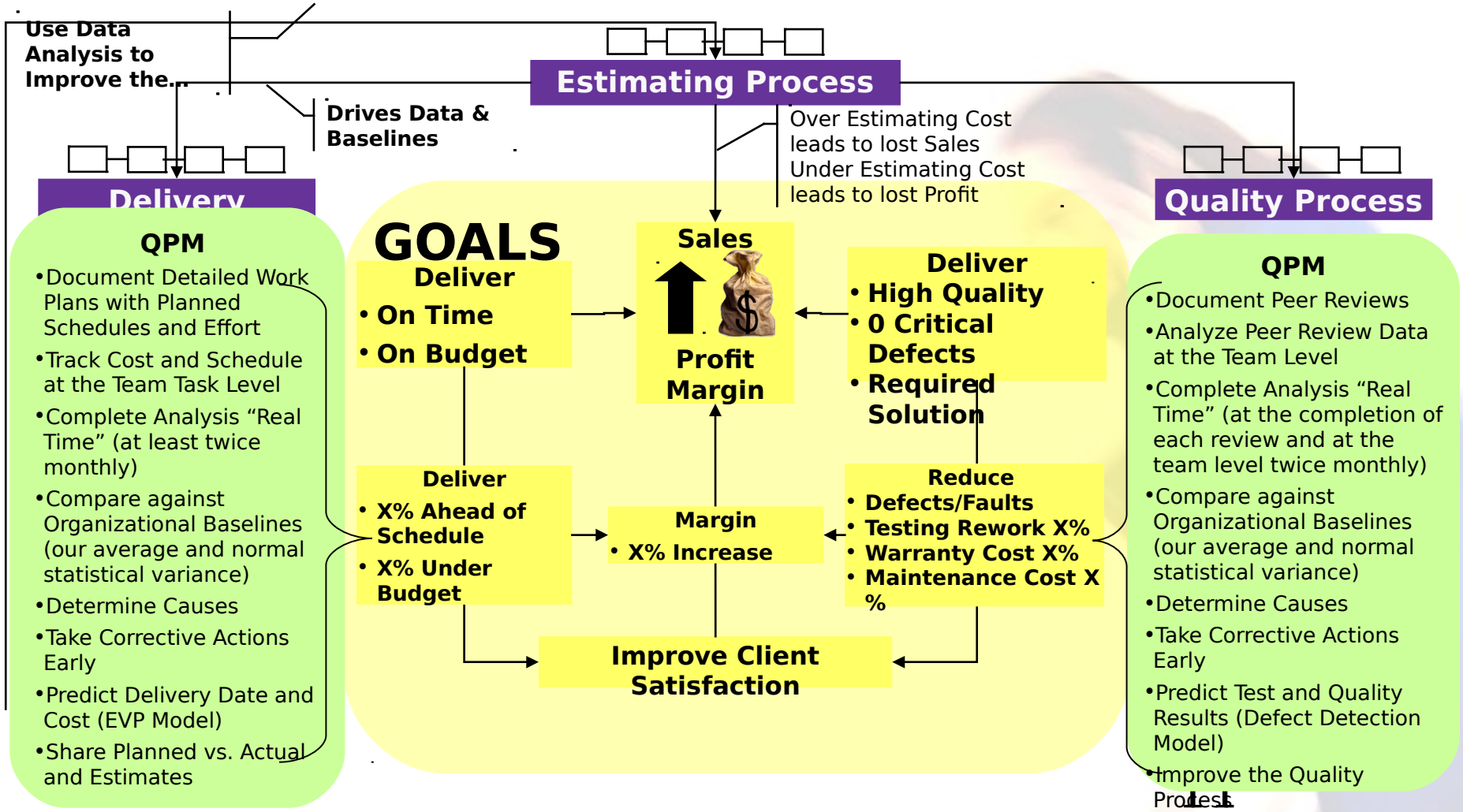
1. Organizational Process Performance (OPP)
2. Quantitative Project Management (QPM)

Capability Maturity Model Integrated		
5	Optimizing	Emphasis on continuous improvement
4	Quantitatively Managed	Process measured and statistically controlled
3	Defined	Process characterized for the organization
2	Managed	Process characterized for projects and is often reactive
1	Initial	Process unpredictable, poorly controlled and reactive

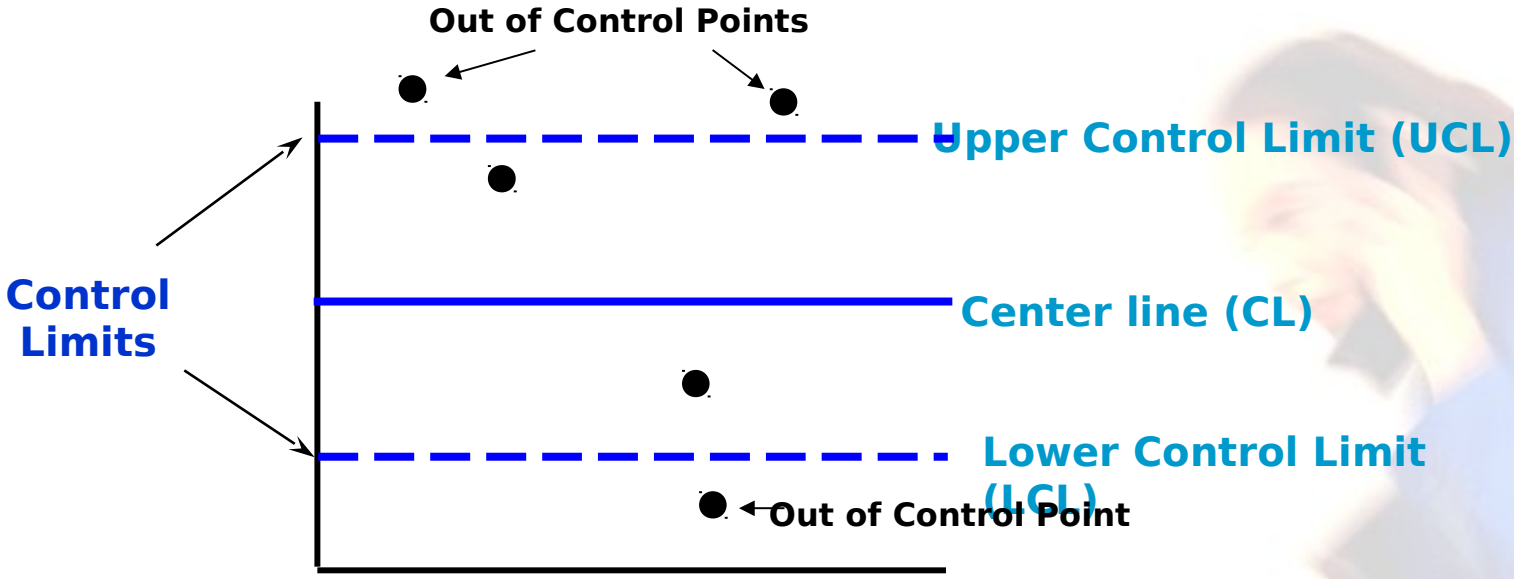
l Level 4 Key Activities:
evelop and communicate the ‘Value Story’

Accenture Goals
Government Operating Group Goals
USA Government Operating Unit (OU)
OU Quality & Process Performance Objectives (On time, On budget, High quality)
Sales and Financial Goals
Project
Project Quality & Process Performance Objectives
•Deliver within x Days of Due Date
•Hours within x% of Budget
•x Critical Defects, x Medium Defects and < x% of Low Critical Defects
Sales and Financial Goals
Drives
Achieves

CMMI Level 4 Key Activities:
3. Select processes that support goals

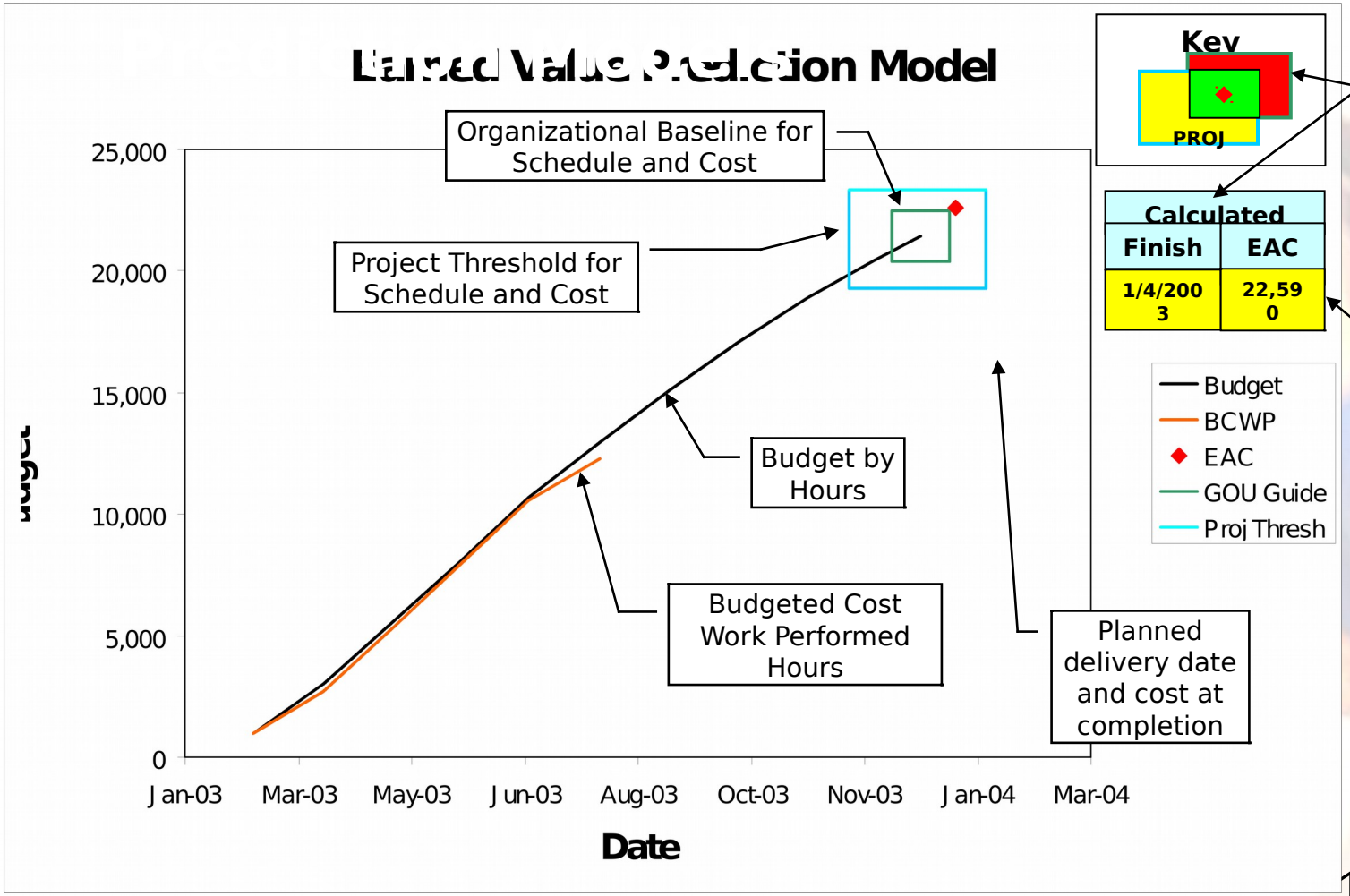

Use Data Analysis to Improve the...
Estimating Process
Drives Data & Baselines
Over Estimating Cost leads to lost Sales
Under Estimating Cost leads to lost Profit
Delivery
Quality Process
QPM
•Document Detailed Work Plans with Planned Schedules and Effort
•Track Cost and Schedule at the Team Task Level
•Complete Analysis "Real Time" (at least twice monthly)
•Compare against Organizational Baselines (our average and normal statistical variance)
•Determine Causes
•Take Corrective Actions Early
•Predict Delivery Date and Cost (EVP Model)
•Share Planned vs. Actual and Estimates
GOALS
Deliver
• On Time
• On Budget
Sales
Profit Margin
Deliver
• High Quality
• 0 Critical Defects
• Required Solution
Deliver
• X% Ahead of Schedule
• X% Under Budget
Margin
• X% Increase
Reduce
• Defects/Faults
• Testing Rework X%
• Warranty Cost X%
• Maintenance Cost X %
Improve Client Satisfaction
QPM
•Document Peer Reviews
•Analyze Peer Review Data at the Team Level
•Complete Analysis "Real Time" (at the completion of each review and at the team level twice monthly)
•Compare against Organizational Baselines (our average and normal statistical variance)
•Determine Causes
•Take Corrective Actions Early
•Predict Test and Quality Results (Defect Detection Model)
•Improve the Quality Process

CMMI Level 4 Key Activities: 4. Develop Level 4 Infrastructure –



Control Limits: Derived <u>quantitatively</u> based on historical measurement data

CMMI Level 4 Key Activities: 5. Develop Level 4 Infrastructure –

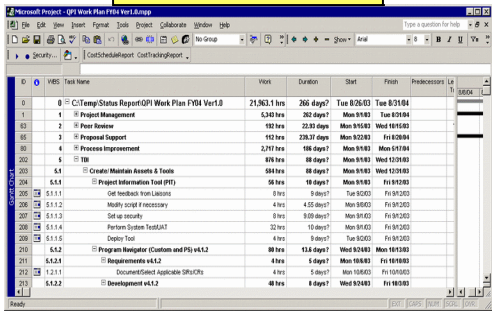


CMMI Level 4 Key Activities: 6. Develop Level 4 Infrastructure –

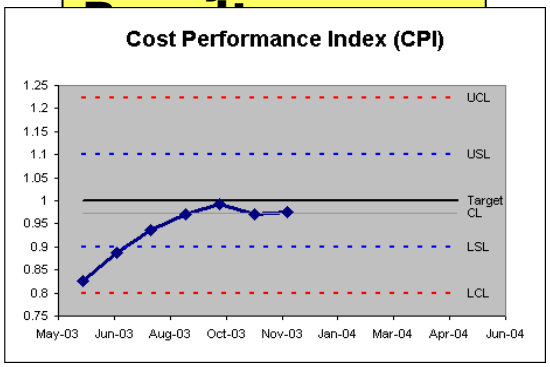
- Managing using Data
- Predicting Future Behavior based on History (Results) – Taking Corrective Actions to Mitigate Risks/Prevent Issues

Goal
- **On Time**
- **On Budget**

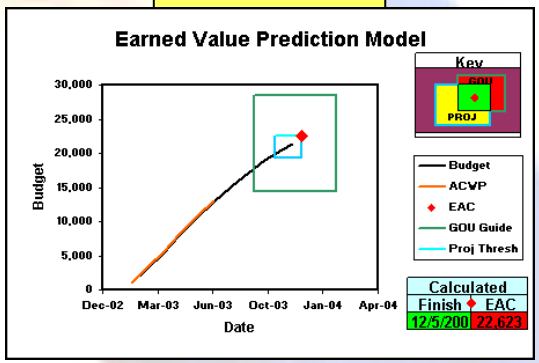
Measure



Analyze



Predict



Take Corrective Action
- **Change Process – e.g.: more peer reviews**
- **Update Project Standards**
- **Modify Resources/Resource Mix**
- **Increase Mentoring and Training**

CMMI Level 4 Key Activities:
7. Actively deploy to projects

- Relentless Communication
  - Leadership communications
  - Monthly newsletter features
  - Executive presentations
  - Town hall Q&A meetings

- On-site QPM Training Delivery
  - Data analysis
  - Use of enabling tools

- ‘Wave’ approach

Transition to CMMI Level 4 Experiences

- Get your ‘Value Story’ straight
- Get CMMI level 2 and 3 right
- Get expert assistance
- QPM stands for Quantitative PROJECT MANAGEMENT (ie. QPM is a project responsibility)

Innovation delivered.

Sarah Bengzon
Accenture Washington DC Metro
Tel: 703.947.1020
sarah.bengzon@accenture.com